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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,342	01/27/2005	Donald Horton	020512.0005US	5752
34284	7590	07/03/2007		
Rutan & Tucker, LLP. Hani Z. Sayed 611 ANTON BLVD SUITE 1400 COSTA MESA, CA 92626			EXAMINER FISHMAN, MARINA	
			ART UNIT 2832	PAPER NUMBER
			MAIL DATE 07/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/523,342

Applicant(s)

HORTON ET AL.

Examiner

Marina Fishman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***General status***

1. This is a First Action on the Merits for RCE. Claims 1 - 12 are pending in the case and are being examined.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9 - 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Lemire [US 6,225,580] in view of Allison et al. [US 3,311,718].

Regarding Claim 9, Lemire discloses a panel mounted rotary switch assembly [panel not shown, thread [60] and nut [61] for mounting to the panel are shown] the switch being mounted above and below the panel, comprising a detent subassembly [12, 40, 54], having a spring [40] on the user side of the panel.

Regarding Claim 9, Lemire, discloses the instant claimed invention except for a sealing member. Allison et al. disclose a sealing member [17], to be disposed between the switch and underside of the panel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a sealing member in Lemire, as suggested by Allison et al., in order to sealingly mount the switch to the panel.

Regarding Claim 10, the method steps are disclosed by Lemire; the user can select circuit by rotating the knob, the balls connecting pattern on circuit board [16].

Regarding Claim 11, the wire connected to the circuit board [Figure 6] will affect the circuit underside of the panel.

4. Claims 1 - 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Allison et al. [US 3,311,718] in view of Tanaka et al. [US 4,857,677] and Fowler [US 4,625,084].

Regarding Claims 1, 9 and 12, Allison et al. disclose a panel mounted rotary switch assembly [panel not shown, thread [15] for mounting to the panel are shown] the switch being mounted above and below the panel, comprising:

- a detent subassembly having a housing [11] and a spring [35]; and
- a seal [17] to be disposed between the switch and underside of the panel.

Regarding Claims 1, 9 and 12, Allison et al. disclose the instant claimed invention except for a knob that substantially covers the detent sub-assembly and the detent sub-assembly located entirely on the user side of the panel. Tanaka et al. disclose a knob [44, Figure 3] that substantially covers the detent sub-assembly and the detent sub-assembly that is entirely on the user side of the panel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the knob that substantially covers the detent sub-assembly and the detent sub-assembly that entirely on the user side of the panel, in Allison et al., as suggested by Tanaka et

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al., so that the detent sub-assembly can be rotated by less force and also that less depth is required for the switch assembly below the panel.

Regarding Claim 2, since the knob is independent of the housing of the detent sub-assembly, the operation of the detent sub-assembly is not altered by removal of the knob. Regarding Claims 3 and 4, Allison et al. disclose detent sub-assembly with a spring [35] and balls [34], and the balls do not extend into the panel. Regarding Claim 5 - 8, Allison et al. disclose detent assembly with two balls [34], one at each end of the spring [35], sprocket with lobe [36], shaft that extends through the panel; and sprocket with cylindrical lobes. Allison et al. discloses claimed invention, except for the circuit board. It would have been obvious to install the terminals [22] of Allison et al. on a circuit board, so that components of the circuit board can be controlled. Regarding Claim 10, the method steps are disclosed by Allison et al.; the user can select circuit by rotating the knob. Regarding Claim 11, the terminals [22] connected to the circuit board will affect the circuit underside of the panel.

5. Claims 1 – 6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler et al. [US 4,625,084] in view of Tanaka et al. [US 4,857,677] and further in view of Allison et al. [US 3,311,718].

Regarding Claims 1 and 9 Fowler et al. disclose a panel mounted rotary switch assembly with panel [31], tongues [140] with barbs [141] are inserted into the panel opening [Figures 1- 3] comprising a detent subassembly [120, Figure 4], having a single spring [127], the detent sub-assembly having housing [24, 25].

Regarding Claim 1, Fowler et al. disclose the instant claimed invention except for a knob that substantially covers the detent sub-assembly. Tanaka et al. disclose a knob [44, Figure 3] that substantially covers the detent sub-assembly and Allison discloses a sealing member [17], to be disposed between the switch and underside of the panel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the knob that substantially covers the detent sub-assembly in Fowler et al., as suggested by Tanaka et al., so that the detent sub-assembly can be rotated by less force and to provide a sealing member in Fowler et al. as suggested by Allison, in order to sealingly mount the switch to the panel. Regarding Claim 2, the operation of the switch of Fowler et al. is not altered by removal of the knob. Regarding Claims 3 and 12, Fowler et al. disclose arrangement with leaf spring and a single ball. Regarding Claim 4, the balls are confined in the detent sub-assembly area, hence will not extend into the panel. Regarding Claims 5 and 6, Fowler et al. disclose instant claimed invention except for shaft extending through the panel and printed circuit board located below the panel. Tanaka et al. disclose printed circuit board [12] located below the panel [11]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide shaft extending through the panel and printed circuit board below the panel in Fowler et al., as suggested by Tanaka et al., in order to reduce the switch height above the panel. Regarding Claim 10, the method steps are disclosed by Fowler et al. and Tanaka et al.; the user can select circuit by rotating the knob, the balls connecting pattern on circuit board [16]. Regarding Claim 11, the wire connected to the circuit board [12] will affect the circuit underside of the panel.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.


***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marina Fishman  
June 25, 2007

  
ELVIN ENAD  
SUPERVISORY PATENT EXAMINER  
27 JUN 07